REMARKS

Claims 1-33 are pending in this application. In the Office Action dated April 30, 2004, the Examiner took the following action: (1) objected to the specification for informalities; (2) objected to claims 15-17 for informalities; (3) rejected claims 1-3, 6-11, 15-21, 25-28 and 30-33 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement; (4) rejected claims 1-3, 8-11, 18-21, 28 and 30-32 under 35 U.S.C. § 112, second paragraph, as failing to distinctly point out and claim the subject matter; (5) rejected claims 4-5, 12-14 and 29 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,310,824 to Schöniger; and (6) rejected claims 22-24 under 35 U.S.C. § 103(a) as being unpatentable over Schöniger.

Applicants are hereby canceling all of the claims rejected on the basis of prior art, namely the patent to Schöniger. Thus, except for the Section 112 rejection, all of the claims remaining in the application are allowable.

The Examiner is correct that there is some confusion in the column address sequences as a result of the modifications to the sequences made in the supplemental preliminary amendment. It appears that the sequences were correct before they were modified by the preliminary amendment, and they conformed to the operation of circuits shown in Figures 2 and 3 as described in the specification. As described in the specification, the burst address sequence decrements whenever (1) in the serial mode, the least significant bit ("LSB") is "1" and (2) in the interleave mode, the next to least significant bit ("NLSB") is "1." In other cases, the burst address sequence increments.

The first example of an address sequence before it was changed by the preliminary amendment is for the serial mode where the LSB is "1." The sequence for that mode, which is one of the two sequences in which the addresses decrement, is:

"1 1 0 1"

"1 1 0 0"

"1 0 1 1"

"1 0 1 0"

"1 0 0 1"

"1 0 0 0"

"0 1 1 1"

"0 1 1 0"

Ignoring the LSB, it will be apparent that the sequence is 6-5-4-3, and both the odd even column is addressed for each of the numbers in that sequence. In practice, it really does not matter what the most significant bit ("MSB) is for a burst of 8 columns because the sequence of 4 numbers (e.g., 6-5-4-3) can be created by the middle two bits (i.e., the above addresses without the MSB and LSB). The sequence would then be 2-1-0-3, which is also a decrementing sequence.

The second example of an address sequence before it was changed by the preliminary amendment is for the interleave mode where the NLSB is"1." The sequence for that mode, which is the other of the two sequences in which the addresses decrement, is:

"1 0 1 1"

"1 0 1 0"

"1 0 0 1"

"1 0 0 0"

"0 1 1 1"

"0 1 1 0"

"0 1 0 1"

"0 1 0 0"

Again, ignoring the LSB, the sequence of addresses is 5-4-3-2, which is a decrementing sequence. Again, since only 4 addresses are needed, the value of the MSB is irrelevant and can be ignored, which would provide a sequence of 1-0-3-2, which is also a decrementing sequence.

The Office Action indicates that the correct sequence in the serial mode is 5-6-7-0-1-2-3-4 rather than 5-4-3-2-1-0-7-6, which the Examiner considers to be correct. That 5-6-7-0-1-2-3-4 sequence in binary form would be:

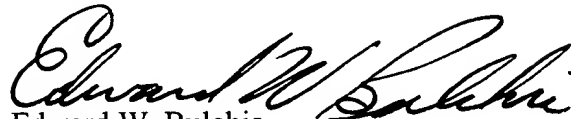"101"

"110"

"111"

"000"

"001"

"010"

"011"

"100"

However, this is an incrementing sequence, and is inconsistent with the operation of the circuits shown in the drawings and as described in the specification. Changing the sequences to the form they had before the preliminary amendment correctly describes the operation of the disclosed embodiments and is entirely consistent with the circuits shown in the drawings, the description of the drawings in the specification, and the original claims. If the Examiner still believes there is a Section 112 problem with the claims, he is kindly requested to telephone the undersigned attorney to discuss the issue.

The objections to the disclosure are also being corrected by this amendment with the exception of the portion referenced at the top of page 3 of the Office Action. The first column of the address sequence on lines 19-23 of page 4 of the Supplemental Preliminary Amendment is believed to be correct for a "1" rather than a "0" in the first column of the address.

All of the claims remaining in the application, namely claims 1-3, 6-11, 15-21, 25-28 and 30-33, are now clearly allowable. Favorable consideration and a timely Notice of Allowance are earnestly solicited.

Respectfully submitted,

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